Introduction

The evolutionary literature has interpreted the variance in female sexuality measures as facultative properties of preference and sociosexuality (B) had them evaluate the appeal of two computer manipulated markers of sexual dimorphism (those present in the faces of men and those in the pitch of their voices), and lastly asked those same women to complete the same measures two weeks later when they were recovered. Reported here are the statistically significant findings and evolutionary explanations of the sociosexual differences participants reported between the sick and recovered conditions. Specifically, significant contrasts existed for four measures of sociosexuality (comfort having casual sex with multiple partners, present attire proceptivity, self-assessed mate value, and reported degree of sexual desire). These preliminary findings suggest more research on the influence health status has on human female sexuality and its other moderators, is warranted.

Methodology

1. Life History Theory—Age affects sociosexual strategy and the preference for masculinity. Women at peak reproductive age have been found to express both (a) a preference for cues indicative of masculinity and (b) more open sociosexualities than their older counterparts (Kosinski et al. 2011). Life history demands such as those experienced by pregnant women, also moderate the preference for facial characteristics. The unique hormonal profile of pregnancy, characterized by consistently elevated levels of progesterone, produces a preference self-resilience and/or healthy looking faces (Debrune et al. 2005, Jones et al. 2005).

2. The Endocrinology of the Luteal & Follicular Phases—During the luteal phase women experience an acute increase in progesterone. Accordingly, women employ the use of prophyllactic precautions that affect both their mate preferences and behavior (Kulash & Fessler 2010). Specifically, they have been found to prefer both (A) feminine male voice pitches and (B) facial health cues (Puts et al. 2005). Ovulation also alters mating behavior and sociosexuality, and warrants the prediction that sociosexual suppression during a “sick” condition is adaptive because it enables the capacity to mediate trade-offs in an evolutionarily stable manner.

The unique hormonal profiles of pregnancy and the luteal phase of the menstrual cycle influence women’s preferences for cues indicative of masculinity and femininity, which are consistent with evolutionary hypotheses of disease, stress, and life history theory. The unique hormonal profile of pregnancy, characterized by consistently elevated levels of progesterone, produces a preference self-resilience and/or healthy looking faces (Debrune et al. 2005, Jones et al. 2005).

At the heart of the context specific nature of female sexuality lays one core principle; compulsory energetic investments (like those of immune system response as motivated by self-maintenance) cause trade-offs that change behavior and psychology (e.g., sociosexuality and mate preferences). Though, stimuli data was not analyzed, significant results for four measures of female sociosexuality were nevertheless found. The difference between participants reported degree of sexual desire during the sick condition was lower than that reported in the recovered condition. Moreover, both a bivariate correlation and nonparametric comparison of sexual desire and symptom severity between conditions found that as symptom severity increased sexual desire respectively diminished. But—given that there is a contextual dependency for any given strategy—might desire or another measure of sociosexuality be further moderated by variables that have the capacity to affect female residual reproductive value (RRR)? We hypothesized that high mate value individuals as well as those in a relationship would benefit least from reproduction during the sick condition because they have higher RRR than their single, low mate value, counterparts. We used a general linear model to test the differences in desire between subjects, with relationship status and high mate value as covariates, and no significant differences were found. However, given the limitations of the study’s design (e.g., its small sample size and use of self-report data) the possibility of the relationship existing has not been discounted. Lastly three other measures of sociosexuality, when taken independently, exhibited statistically significant contrasts. Women in the recovered condition report (A) a higher level of hypothetical comfort to have casual sex with multiple partners, (B) increased feelings of selfishness and overall body and facial attractiveness, and (C) when asked to evaluate how attractive their mate is, females answered a lower state of self-assessed attractiveness. Such findings, though preliminary, warrant further research. Such research should identify the proximate mechanisms responsible for the condition contrasts. Moreover, research on the effect health status might have on human female mate preferences should target the effect facial features like symmetry and cues of “good health” might have on attraction assessments. Lastly, it would be interesting to see if a facultative preference for a type of immunohistocompatibility marker varies across health status conditions.

Conclusions & Further Research

The Facultative Properties of Preference & Sociosexuality

HEALTH STATUS EFFECTS ON HUMAN FEMALE MATE PREFERENCES & SOCIOSEXUALITY

Methodology

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19 normally cycling adult females, mean age 22, experiencing the symptoms of an upper respiratory infection completed a six page questionnaire designed to assess sociodemographic data, sociosexuality measures, relationship status, symptom severity, and current, if any, hormonally altering method of contraception and/or medication. Participants evaluated (1) the appeal of pre-recorded male voices varying in pitch on a 1-5 scale (Puts et al. 2007 for stimuli information) and (2) five sets of 2D composite male faces that featured varying degrees of facial dimorphism (see Puts-Voak 2002 for stimuli information). Participants were asked to evaluate the 2D photographs in terms of five characteristics (health, “niceness”, “masculineness”, and long-term/short term attractiveness), trials were not timed. For the follow-up condition, subjects completed the same measures, two-weeks later, via an online portal.

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